

In the claims:

Please amend the claims as shown below:

- 5 1. (Currently amended) A hand-held sensor device applied to
the skin of a patient, comprising:
a roller which rotates about an axis, the roller being in
operative engagement with a housing;
a peltier element disposed inside the roller and having a
10 cooled surface and a heated surface, the peltier element being
connected to a power source to obtain a temperature difference
between the cooled surface and the heated surface thereof, the
cooled surface being cooled by the peltier element and an ~~the~~
inner surface being heated by the peltier element and directed
15 in a direction that is opposite the direction of the cooled
surface, the cooled surface of the peltier element being in
operative engagement with an inside surface of the roller to
cool the roller, the roller which is cooled by the cooled
surface of the peltier element being applied to the skin of
20 the patient.

2. (Previously presented) The sensor device according to
claim 1 wherein heat is led away from the heated surface and
the surface is in contact with the housing that has a high
25 heat conductivity and formed with an area of flanges in order
to increase heat transfer to another medium that is in contact

with the flanges.

3. (Previously presented) The sensor device according to claim
1 wherein a segment is in operative thermal contact with a
5 volume containing another material that has high thermal
capacity and stores heat from the inner surface ~~(43)~~.

4. (Previously presented) The sensor device according to
claim 1 wherein the peltier element is held against the
10 housing by a holder made of a material with low heat
conductivity.

5. (Previously presented) The sensor device according to
claim 1 wherein a cover plate, in contact with the peltier
15 element, bears against a surface of the roller.

6. (Previously presented) The sensor device according to claim
5 wherein the peltier element is in operative engagement with
the cylindrical outer surface of the roller.
20

7. (Previously presented) The sensor device according to claim
1 wherein the roller is rotatably attached to the housing and
is made of a material with high heat conductivity.

25 8. (Previously presented) The sensor device according to claim
6 wherein the roller is in contact with an isolation material

that is cooled by the peltier element.

9. (Currently amended) A hand-held sensor device applied to the skin of a patient, comprising:

5 a peltier element held by a holder attached ~~by threads~~ to an outer end of a housing, the housing having an enlarged cooling segment with outwardly protruding flanges that completely surrounds the peltier element, the enlarged cooling segment being made of a material with a high heat conductivity to
10 increase heat transfer;

the peltier element being in contact with the housing ~~(24)~~ and disposed on the outer end of the housing;

the peltier element having a cooled surface ~~(41)~~ and a heated surface, the peltier element being connected to a power source
15 to obtain a temperature difference between the cooled surface and the heated surface thereof, the cooled surface being cooled by the peltier element and an ~~the~~ inner surface being heated by the peltier element and directed in a direction that is opposite the direction of the cooled surface;

20 the cooled surface providing a cooled testing surface, the heated surface being in contact with the enlarged cooling segment of the housing that has a high heat conductivity for effectively transferring heat from the heated surface ~~and the housing having a volume for absorbing the heat, the housing~~
25 ~~having a surface formed with an area of flanges in order to increase heat transfer~~ to another medium contained within the housing that is in contact with the outwardly protruding

flanges of the enlarged cooling segment;

the holder being made from a material with a low heat conductivity, that is lower than the high heat conductivity of the enlarged cooling segment ~~element~~ of the housing, to avoid heat transfer between the cooled ~~cold~~ surface and the heated ~~hot~~ surface, the cooled testing surface being applied to the skin of the patient.

10. (Previously presented) The sensor device according to claim 9 wherein the sensor device has a cover plate held by the holder.

11. (Previously presented) The sensor device according to claim 9 wherein the housing has a cavity defined therein, the cavity contains a material that has a high thermal capacity higher than a thermal capacity of the housing for storing heat from the inner surface.